Economical entry-level Mini-Barebone

XPC Barebone

SG41J1 Black

This Mini-PC Barebone is the first offspring of Shuttle's new J series and has been completely redesigned from top to bottom. It combines for the first time the features of various entry-level models to enable the widest possible spectrum of applications. Uncompromising reliability and maximum compatibility are guaranteed by the G41 Express Chipset technology in the SG41J1. Up to 8 GB dual channel memory and modern Intel Celeron and Core 2 processors with one to four cores are possible. An Intel GMA X4500 graphics processor that supports DirectX-10 is already integrated in the system. In addition to USB, PS/2, parallel and COM ports, the SG41J1 also offers a PCI-Express and 32-bit PCI interface.

Feature Highlight

J1 chassis	• Black case, 32.5 x 21.5 x 19 cm LWH • Standard storage bays for 1x optical drive and 2x hard disks
Chipset and Graphics	• Intel G41 + ICH7 • Integrated Intel GMA X4500 graphics Shared Memory: max. 1759MB **) Video out: DVI-D •
CPU	• Socket 775, max. 95W TDP • Supports Intel Core 2 Quad/Duo, Pentium & Celeron Dual-Core/4xx Supports 800, 1066 & 1333 MHz FSB •
Slots	• 1x PCI-Express (x16) • 1x PCI (32 Bit)
Memory	• Supports 2x DDR2-667/800 • Supports up to 2x 4GB
Drive connectors	• 3x Serial-ATA 3 Gb/s • 1x IDE ATA 100
Other connectors	• 5.1-channel HD audio • USB 2.0 (2x front, 4x rear, 2x onb.) • GigaBit LAN • Serial and parallel port ***)
Power supply	• 250 Watt mini power supply
Application	• Basic

Images for illustration purpose only.

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Shuttle order code: PC-SG41J1

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Shuttle XPC Barebone SG41J1 – Special Product Features

The new J-Chassis: a clean and modern look

Shuttle has always placed great emphasis on the interior and exterior aesthetics of the XPC, with the belief that a good blend of style and form factor allows the Shuttle to be attractive, versatile, and work well in almost any environment - whether the living room, bedroom, or office. With the new J Series, Shuttle retains its trademark appearance and adds a clean, modern look to the front of the XPC. The new J Series will also be the first to bear the new XPC logo, featuring a striking "X" mark to signify the evolution of the XPC product line. At the same time the logo works as a stylish illuminated power button.

Stealth bay for optical drive

The J1's chassis clean facia derives from its engineered optical drive bays, which is hidden from view when not in use — providing superior style and visual appeal.

Small, but easy to install

Shuttle's XPCs offer the power of a desktop PC in a form factor one-third the size while using standard desktop components. Shuttle kept the concept of "future proofing" in mind when it designed the new J Series. The meticulously designed layout features an interior cable management system with pre-installed cables that are routed and tied down at factory to reduce clutter, increase airflow, and ease component installation. Shuttle has developed the ease of installation to an Art of Perfection.

What does Barebone mean?

The Shuttle XPC Barebone SG41J1 consists of a stylish case with pre-installed mainboard, power supply unit (PSU) and cables. Despite its small form factor it offers outstanding connectivity, functionality and performance. For a complete PC system you still need a few components. The XPC is completely customizable, users can pick the processor, memory, storage and expansion options that fit their needs. Sometimes a discete graphics card is desireable.

Supports Dual-Slot Graphics Cards

With a renewed mainboard layout, the SG41J1 is capable of running dual-slot (double-width) PCI Express graphics cards which do not require additional power supply. Please refer the support list for detailed support information. Note, that the integrated graphics will be disabled, while using a discrete graphics card.

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Supports Socket-775 CPU and up to 8 GB DDR2

You can chose from a wide range of Socket 775 Intel processors starting from Celeron up to Quad Core with a maximum TDP wattage of 95W. Also the system memory can be installed according your needs up to a total size of 8GB DDR2-800.

Supports one optical drive and two harddisks

Despite the small housing, the user can install one optical drive and up to two hard disks into the SG41J1. But what about the heat? Many of the clever design elements of the XPC get little attention. For example, the drive rack built into the SG41J1 keeps a space between the hard disks free for the air flow. Intelligently-engineered airflow mechanics channels cool air to where it's need most - protecting your investment and providing optimal performance.

Mini-ITX Mainboard Support

Shuttle expands the capabilities of its chassis, adding support for Mini-ITX mainboards (17 x 17cm or 6.7 x 6.7 inches). Now, for the first time, the Shuttle chassis can go beyond the Shuttle mainboard, so you can easily upgrade or downgrade the mainboard to your desire, without any modifications to the chassis.

Gigabit LAN Network

Today's media-rich communications across the Internet and within organizations are creating new demands on clients in Local Area Networks. For that reason Shuttle introduces the Gigabit LAN performance even in the business and entry level segment of their XPC line.

Solid Capacitors

The new generation of solid capacitors is used in the temperature sensitive part of the CPU voltage regulator. The lifespan of solid capacitors is in fact up to six times longer than the more common electrolytic capacitors.

Serial and parallel ports

The accessory box contains a slot bracket adapter which can be used to provide one serial and one parallel port at the back panel. The cable of this adapter will be connected to the onboard LPC port and one expansion slot (PCI or PCI Express) will be occupied by the adapter. Many PCs do not have these legacy ports since they have been superseded for most consumer applications, but they are commonly still used in applications such as industrial automation systems, scientific analysis, POS systems and some industrial products.

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Shuttle XPC Barebone SG41J1 Black Specification

Chassis	J-type chassis made of steel Storage bays: 1x 13.5 cm (5.25") external, 2x 8.9cm (3.5") internal Dimensions: 32.5 x 21.5 x 19 cm (LWH) = 13.3 liters Weight: 7.0 kg net, 7.5 kg gross 9.2cm rpm-controlled system fan with 4 pin connector Kensington Security Slot at the back panel (also called a K-Slot or Kensington lock) as a part of an anti-theft system
Mainboard	Shuttle FG41, Shuttle form factor Proprietary mainboard design for Shuttle XPC Barebone SG41J1 Chipset: Intel G41 Express + ICH7 (TDP: 24W + 3.3W)
BIOS	AMI legacy core SPI interface, 8MB Flash ROM Supports PnP, ACPI 3.0 Supports external USB flash memory card boot up
Power Supply	250 Watt mini power supply unit Input voltage range: 100~240V Connectors: 20-pin ATX, 4-pin ATX12V Active PFC (Power Factor Correction)
Processor Support	Socket 775 Supports Intel Core 2 Quad, Core 2 Duo, Pentium Dual Core, Celeron Dual-Core, Celeron 4xx Supports 800, 1066 or 1333 MHz front side bus (FSB) Maximum power consumption: TDP = 95W max. Processors with 533MHz FSB are not supported. Please refer the support list for detailed processor support information.
Processor Cooling	Processor cooling fan is not included Please purchase an Intel boxed processor. The maximum cooler dimensions are 7.5 x 7.5 x 8 cm The mainboard supports temperature-controlled RPM fan speed by the BIOS. Optional: Shuttle heat-pipe cooling system with 92mm fan
Memory Support	2 x 240 pin DIMM memory slots Supports Dual Channel with up to 12.8 GB/s data transfer rate Supports DDR2-800/667 (PC2-6400/5300) unbuffered SDRAM memory Supports DDR2-1066 (PC2-8500) in overclocking mode *) Up to a total size of 8 GB, max. 4 GB per DIMM
Expansion Slots	1 x PCI-Express x16X (v1.1) 1 x PCI (32 Bit) Supports Dual-slot (double-width) PCI Express x16 graphics cards, however, you cannot use the PCI slot in this case. ***)

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Integrated Graphics	Intel Graphics Media Accelerator X4500 (GMA X4500) Supports Microsoft DirectX 10, Shader Model 4.0 und OpenGL 2.0 Supports Intel Clear Video Technology with ProcAmp color control Maximum DVI resolution: 2048x1536 Max. shared video memory size (UMA): 1759MB**)
5.1-channel Audio	Audio Realtek® ALC 662 6-channel High-Definition Audio Three analog audio connectors (3.5mm) at the Back-Panel: 1) Front Line out (head phone) 2) Rear Surround line-out (shared with microphone input) 3) Center line-out (shared with Line in) Front panel: microphone input and head phone output
Gigabit-LAN Controller	Marvell 88E8057 Ethernet network controller (Gigabit) Supports 100 / 1.000 MBit/s operation (100Base-TX/1000Base-T) Supports Wake-on-LAN (WOL)
Drive connectors	3x Serial-ATA II, 3 Gbit/s (300 MB/s) bandwidth 1 x IDE ATA 100 drives Pre-installed cables: 1x SATA, 1x IDE
Front panel connectors	Microphone (3,5 mm) Headphone /Line-out (3,5 mm) 2x USB 2.0 (Hi-Speed) Power button Power on LED (blue) Hard disk read/write LED (orange)
Back panel connectors	DVI-D output (24 pin, digital) 4x USB 2.0 (Hi-Speed) GigaBit LAN (RJ45) PS/2 keyboard (6-pol. Mini-DIN) PS/2 mouse (6-pol. Mini-DIN) Audio Front Line in, Line out, Microphone (shared with 6-ch line out) Clear CMOS button Serial and parallel port ***)
Other connectors	2x fan connectors for system and cpu fan (two 4 pin header) 2x USB 2.0 (2x5 pin header) LPC port ***) Audio Aux-in
Accessories	XPC Multilanguage Quick User Guide XPC Driver CDROM (Windows XP, Vista 32 / 64 bit and Win7 32/ 64 bit) Power cord Pre-installed cables: 1x IDE, 1x SATA 4 pin Molex to SATA power cable Screws

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Conformity Certification	EMI: FCC, CE, BSMI Safety: CB, BSMI Others: RoHS, Eup Lot6

*) Overclocking Warning
Please note there is a certain risk involved with overclocking, including adjusting the setting in the BIOS or using third-party overclocking tools. Overclocking may affect your system stability or even cause damage of the components and devices of your system. It is done at your own risk and expense. Shuttle cannot be held responsible for possible damage caused by overclocking.
**) Shared Memory Size
The shared memory size is dynamically controlled by VGA driver, and the Max. shared memory size will be available only when 4GB or more memory is installed under 64-bit OS.
***) Slot bracket adapter for serial and prallel ports
The accessory box contains a slot bracket adapter which can be used to provide one serial and one parallel port at the back panel. The cable of this adapter will be connected to the onboard LPC port and one expansion slot (PCI or PCI Express) will be occupied by the adapter.

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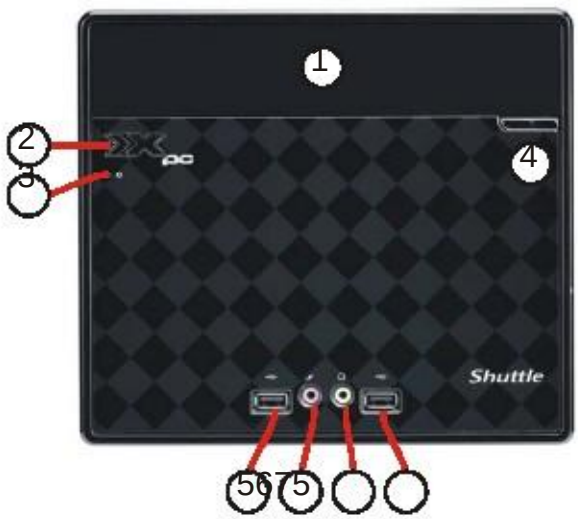
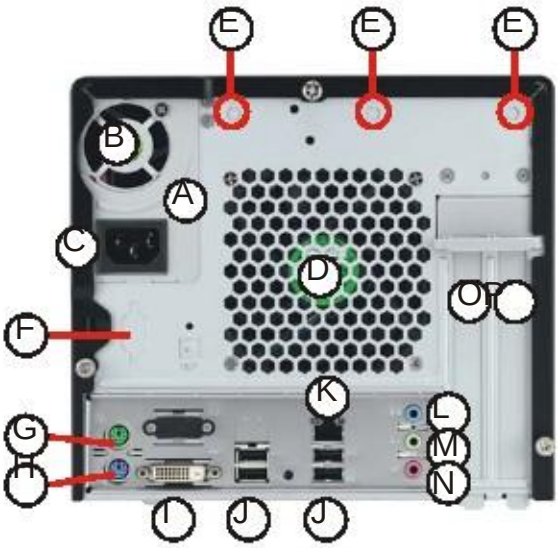
Shuttle XPC Barebone SG41J1 Black – Connectors

Front View



Rear View

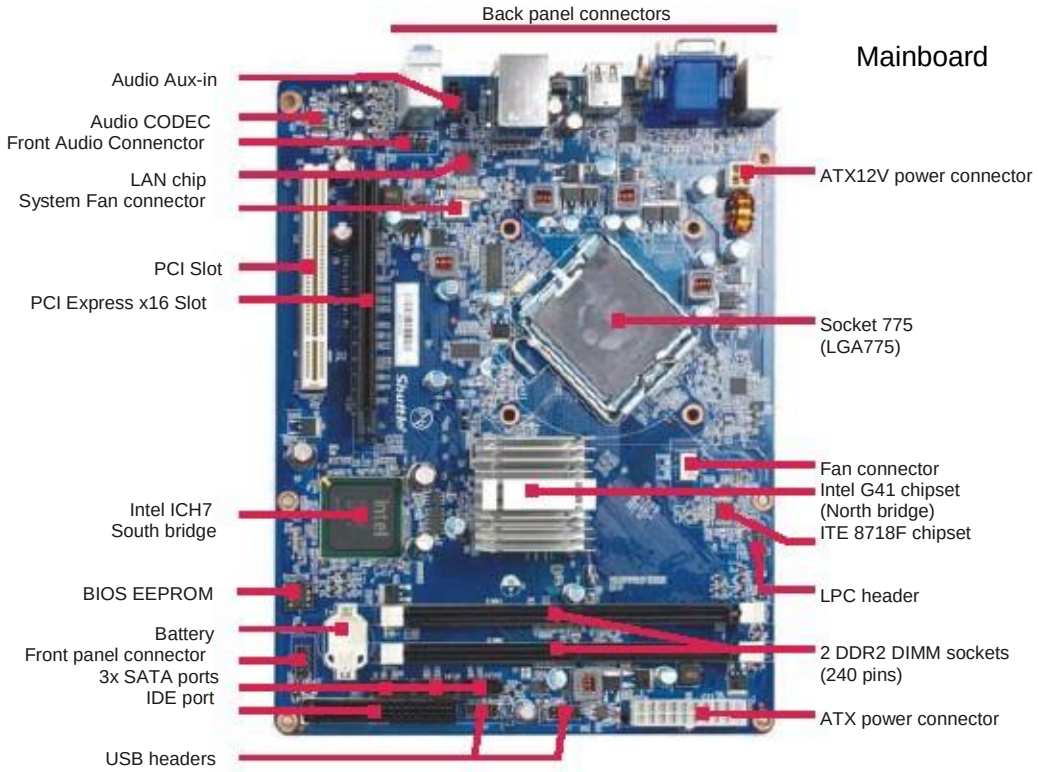


(1) 5.25" bay
(2) Power button
(3) Power LED
(4) DVD Eject button
(5) 2x USB ports
(6) Microphone input
(7) Headphone output

(A) Power supply consist of
(B) PSU cooling fan and
(C) AC power connector
(D) Chassis cooling fan
(E) Wireless LAN perforation
(F) Serial port perforation
(G) PS/2 mouse port
(H) PS/2 keyboard port

(I) DVI-D video port (digital)
(J) 4x USB ports
(K) RJ45 LAN port
(L) Audio Line-in port
(M) Audio Line-out port
(N) Microphone-in port
(O) PCI-Express X16 slot
(P) PCI slot

Mainboard



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